Paper No. 24

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte RONALD M. WOLF, GLENN R. SKUTT,
and LIMING YE

Appeal No. 2001-0716
Application No. 08/813,132

ON BRIEF

Before JERRY SMITH, BARRETT, and RUGGIERO, Administrative Patent Judges.

RUGGIERO, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal from the final rejection of claims 1-3. Claims 4-13 have been indicated to be allowable by the Examiner subject to being rewritten in independent from to include all the limitations of the base claim and any intervening claims.

The disclosed invention relates to a planar magnetic winding structure having a core of two or more core components with mutually facing planar surfaces separated by an air gap having a height g. Further included in the winding structure are a stack of winding layers, each layer including one or more turns, in which the edges of the windings are separated from the air gap by a distance of at least 2g. According to Appellants (Specification, pages 4 and 5), a winding structure having an air gap "keep away" region of at least two times the gap height in which there are no windings reduces high frequency winding losses without appreciable increases in low frequency winding losses.

Claim 1 is illustrative of the invention and reads as follows:

1. A planar magnetic winding structure comprising a core and a stack of winding layers including one or more turns, the core comprised of two or more core components having mutually facing planar surfaces separated by at least one air gap g, and all surfaces of the winding layers are separated from the air gap by a distance of at least 2g.

The Examiner relies on the following prior art:

House et al. (House)	4,480,377	Nov. 06, 1984
Estrov	5,010,314	Apr. 23, 1991

Claims 1-3, all of the appealed claims, stand finally rejected under 35 U.S.C. § 103(a) as being unpatentable over House in view of Estrov.

Rather than reiterate the arguments of Appellants and the Examiner, reference is made to the Briefs[1] and Answer for the respective details.

OPINION

We have carefully considered the subject matter on appeal, the rejection advanced by the Examiner, the arguments in support of the rejection and the evidence of obviousness relied upon by the Examiner as support for the rejection. We have, likewise, reviewed and taken into consideration, in reaching our decision, Appellants' arguments set forth in the Briefs along with the Examiner's rationale in support of the rejection and arguments in rebuttal set forth in the Examiner's Answer.

It is our view, after consideration of the record before us, that the evidence relied upon and the level of skill in the particular art would not have suggested to one of ordinary skill in the art the invention as set forth in claims 1-3.

[1] The Appeal Brief was filed May 3, 2000 (Paper No. 20). In response to the Examiner's Answer dated June 26, 2000 (Paper No. 21), a Reply Brief was filed September 1, 2000 (Paper No. 22), which was acknowledged and entered by the Examiner as indicated in the communication dated September 13, 2000 (Paper No. 23).

Accordingly, we reverse.

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the Examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the Examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the Examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d

1443, 1444 (Fed. Cir. 1992).

With respect to independent claim 1, the Examiner, as the basis for the obviousness rejection, proposes to modify the laminated winding core structure disclosure of House. According to the Examiner (Answer, page 3), House discloses the claimed invention "... except for the wound coils comprising a stack of winding layers." To address this deficiency, the Examiner turns to Estrov which discloses a transformer structure made up of a stack of layers of planar windings. In the Examiner's analysis (id.), the skilled artisan would have been motivated and found it obvious to substitute the planar winding structure of Estrov for the coil windings of House in order to "... make the transformer easy to assemble either by hand or machine."

In response, Appellants assert that the Examiner has failed to establish a prima facie case of obviousness since the applied prior art House and Estrov references, even if combined, do not teach or suggest all of the limitations of independent claim 1. In particular, Appellants assert (Brief, pages 6-9; Reply Brief, pages 2 and 3) that, in contrast to the specific language of appealed claim 1, neither House nor Estrov provide any disclosure of a winding structure in which all surfaces of the winding layers are separated by a distance of at least 2g from an air gap

which is defined by a distance g between two mutually facing planar surfaces of the core components.

After careful review of the applied prior art references, in light of the arguments of record, we are in general agreement with Appellants' position as stated in the Briefs. In addressing Appellants' arguments, the Examiner (Answer, page 4) directs attention to the illustration in Figure 2 of House which illustrates an air gap distance (corresponding to the claimed dimension g) between the upper surface of center leg 15 and the lower surface of member 30. Further, again referring to House's Figure 2, the Examiner points to the illustration of the distance between the coil surfaces 25 and the air gap g which, although the Examiner characterizes it as an "accidental disclosure," the Examiner nevertheless concludes (id.) that this distance "... appears to be 2g or greater" as claimed.

While we agree with the Examiner (Answer, page 5) that a reference is to be evaluated for all it fairly teaches, our review of the House reference reveals, however, that no basis exists for the Examiner's conclusions. Conclusions based on illustrated drawing features when the drawings are not to scale and the disclosure is silent as to dimensions are of little value. In re Wright, 569 F.2d 1124, 1128, 193 USPQ 332, 336

(CCPA 1977). Further, from the disclosure of House, it is our view that any conclusions as to the distance from the coils to the air gap would be based purely on unwarranted speculation, since, as alluded to by Appellants (Brief, page 9), House has no concern with keeping the coils away from the air gap at a certain distance or, for that matter, any distance at all.

In view of the above discussion, it is our view that, since all of the limitations of the appealed claims are not taught or suggested by the applied prior art House and Estrov references, the Examiner has not established a prima facie case of obviousness. Accordingly, the 35 U.S.C. § 103(a) rejection of independent claim 1, as well as claims 2 and 3 dependent thereon, is not sustained.

In conclusion, we have not sustained the Examiner's 35 U.S.C. § 103(a) rejection of any of the claims on appeal. Therefore, the decision of the Examiner rejecting claims 1-3 is reversed.

REVERSED

JERRY SMITH Administrative Patent Judge)	)
LEE E. BARRETT Administrative Patent Judge)	)BOARD OF PATENT APPEALS AND)INTERFERENCES
JOSEPH F. RUGGIERO Administrative Patent Judge)	)

JFR/dal

PHILIPS ELECTRONICS NORTH AMERICAN CORP
580 WHITE PLAINS RD
TARRYTOWN NY 10591